

**Work Order ID 79160**

January-23-12 9:08:22 AM

**\*79160\***

Page 1

Item ID: D3959-3KGY

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Duct, Vertical Tunnel, Aft Center

Start Date: 1/23/12 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/23/12 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3959	B
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100

0.00

**\*100\***

HandThermo

Memo

0.00

Hand Finishing Thermoforming

I-Cut Sheet to required Blank size

x1

DH  
12/01/23

105

0.00

**\*105\***

HandThermo

Dry Material

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 KYDEX

Temp: 150° FTime IN: 8:00 pm 12/01/22Time OUT: 6:00 am 12/01/23

x1

DH  
12/01/23

**\*79160\***

January-23-12 9:08:22 AM

**\*N900040100\***

Setup Start \*NS1\*

Stop **\*NS2\***

**Start Date:** 1/23/12      **Start Qty:** 1.00      **\*1\***

**Cust Item ID:**

**Required Date:** 1/23/12      **Req'd Qty:** 1.00      **\* 1 \***

**Customer:**

Run Start \*NR1\*

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop **\*NR2\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

110

0.00

**\*110\***

0.00

### Thermoform

## Thermoforming Machine

## Memo

### 1-Machine Set-Up

2-Pre-heat Tool to required temp.

3-Thermoform as per Dwg and Folio #FTA077 using tool DT9332-B

Dwg Rev: B

Folio Rev: 5

120

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*120\***

0.00

QC

## Quality Control

## Memo

Visually inspect part for proper formation and texture

130

QC8- Inspect parts - second check

0.00

**\*130\***

0.00

QC

## Quality Control

**\*79160\***

January-23-12 9:08:22 AM

**\*N900040100\***

Setup Start \*NS1\*

Stop **\*NS2\***

**Start Date:** 1/23/12      **Start Qty:** 1.00      **\*1\***

**Cust Item ID:**

**Required Date:** 1/23/12      **Req'd Qty:** 1.00      **\* 1 \***

**Customer:**

Run Start \*NR1\*

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

140

0.00

**\*140\***

0.00

HandThermo

## Memo

### Hand Finishing Thermoforming

1-Trim to finished dimensions as per Dwg

150

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*150\***

0.00

QC

## Memo

## Quality Control

Complete FAI document

160

QC5- Inspect part completeness to step on W/O

0.00

**\*160\***

0.00

QC

## Memo

## Quality Control

# Work Order ID 79160

**\*79160\***

Page 4

January-23-12 9:08:22 AM

Item ID: D3959-3KGY

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Duct, Vertical Tunnel, Aft Center

Start Date: 1/23/12

Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 1/23/12

Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

170

Identify as per dwg & Stock Location: THRM

0.00

**\*170\***

Packaging

Memo

See B 78094

0.00

Packaging

dh  
12/01/12

180

QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC

Memo

0.00

Quality Control

12/1/23

12-01-23

# Picklist Print

January-23-12 9:08:22 AM

Page 1

Work Order ID: 79160

Parent Item: D3959-3KGY

Start Date: 1/23/12

Required Date: 1/23/12

Parent Item Name: Duct, Vertical Tunnel, Aft Center

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A New Issue 10/04/19 DL  
Material 10/04/21 DL

IPP Rev. B Add Step 105 Dry

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MKYD6185S.080-P3- 52068 Kydex steel grey		Purchased	No			100	sf	811.6796	6.729	6.729			

Location

Loc Qty

Loc Code

therm

811.6795592

111807

10.4896282

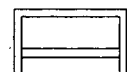
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801.189931

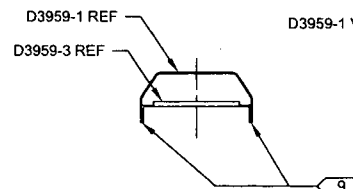
6.729

2h  
12/01/23

ITEM	QTY -041 KIV	QTY -041 KGY	PART NUMBER	DESCRIPTION
	X		D3959-041KIV	VERTICAL TUNNEL (IVORY)
		X	D3959-041KGY	VERTICAL TUNNEL (STEEL GRAY)
1	1		D3959-1KIV	VERTICAL TUNNEL (IVORY)
2	1		D3959-1KGY	VERTICAL TUNNEL (STEEL GRAY)
3		1	D3959-3KIV	DUCT, VERTICAL TUNNEL (IVORY)
4		1	D3959-3KGY	DUCT, VERTICAL TUNNEL (STEEL GRAY)
10	A/R	A/R	EZ250150	ADHESIVE, 3M SCOTCH WELD

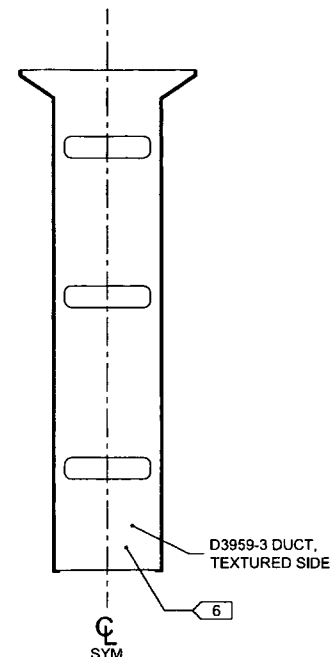
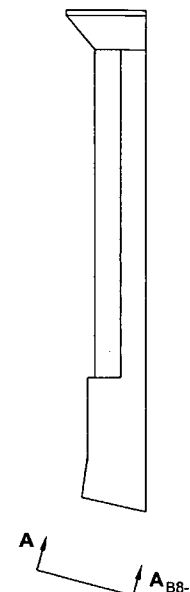
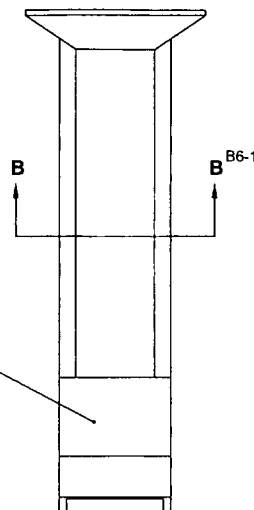
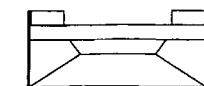


VIEW A-A B3-1



SECTION B-B C4-1

D3959-1 REF  
D3959-3 REF  
D3959-1 VERTICAL TUNNEL,  
TEXTURED SIDE



# D3959-041 VERTICAL TUNNEL, AFT CENTER

## NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N D3959-041KIV OR D3959-041KGY USING VIBRATING STYLUS
- 7) WEIGHT: 2.8 lbs
- 8) TRIM D3959-3 DUCT AS REQUIRED TO ALLOW PROPER MATING
- 9) SEAL MATING EDGES WITH EZ250150 ADHESIVE ALONG MATING PERIMETER WITH MINIMUM THICKNESS OF 0.020"

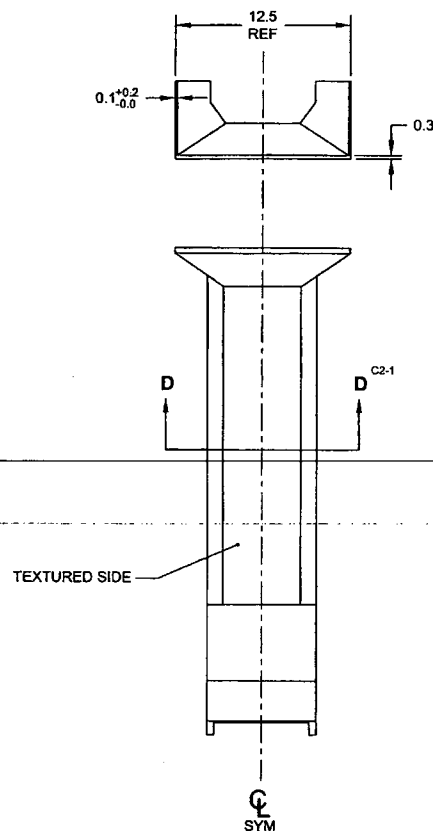
B	ADD -3/-041	PH	09.12.15
A	NEW ISSUE	PH	09.06.17
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	PH		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH		
DATE	09.12.15		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

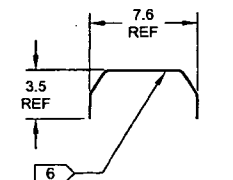
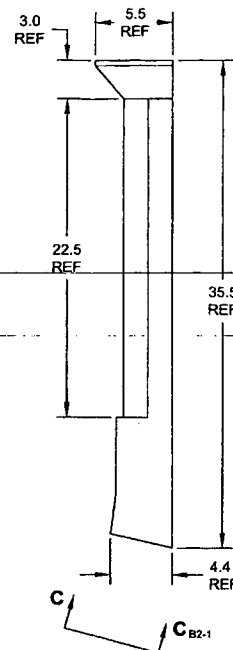
DRAWING NO. D3959 REV. B  
SHEET 1 OF 3  
TITLE VERTICAL TUNNEL (206 L3/L4) SCALE NTS

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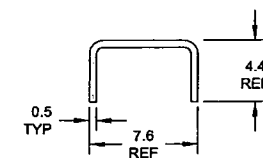
**RELEASED**  
2010-01-06  
MM



**D3959-1 VERTICAL TUNNEL, AFT CENTER**



**SECTION D-D**



**VIEW C-C**

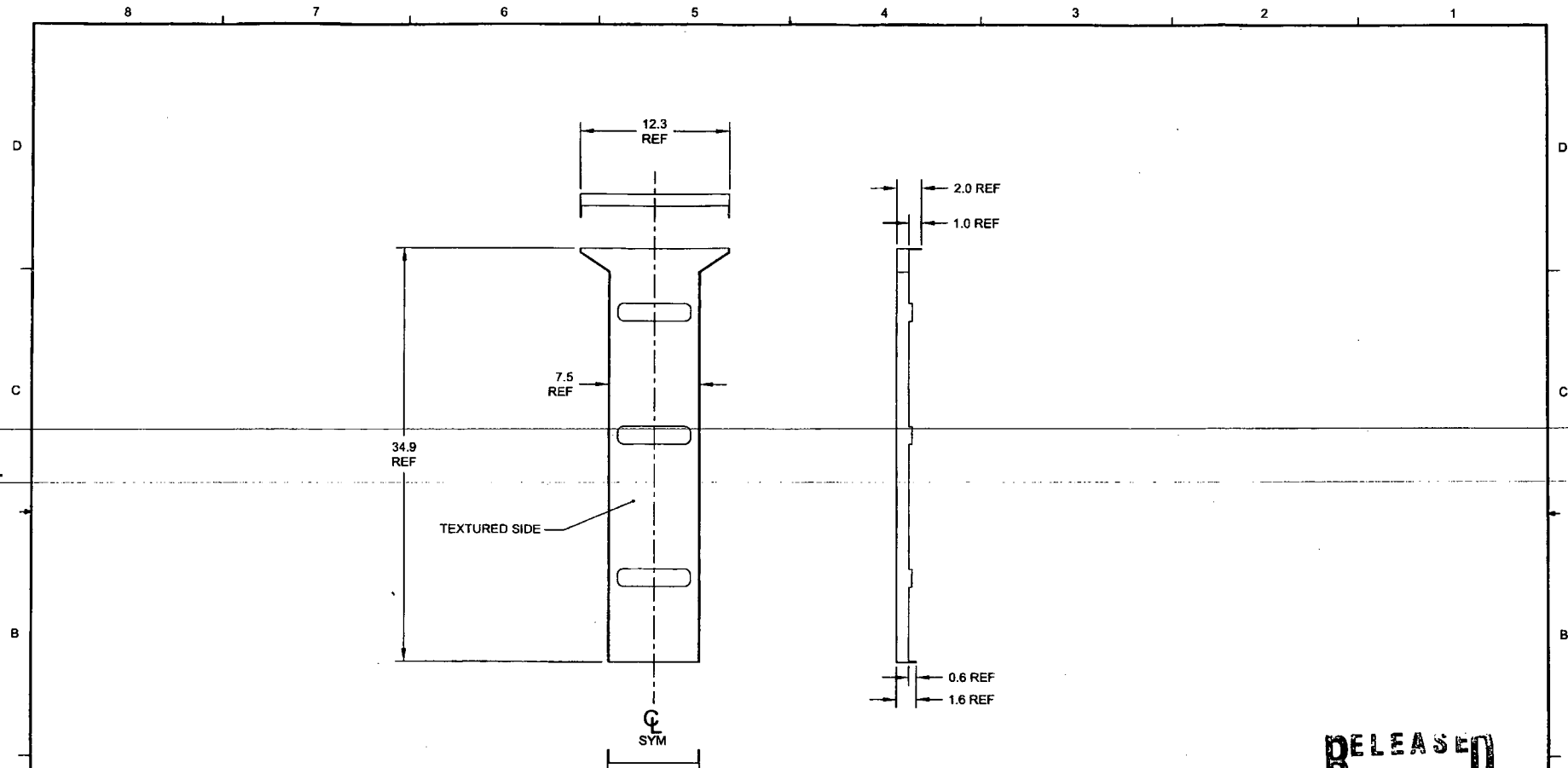
**RELEASED**  
2010-01-06

**NOTES:**

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: SEE -041
- 8) TOOLING: THERMOFORM PER MOLD DT9332-A PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.035" UNLESS OTHERWISE NOTED

PART NUMBER	DESCRIPTION
D3959-1KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3959-1KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. B
MFG. APPR.	PH	D3959	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	VERTICAL TUNNEL (206 L3/L4)	NTS
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**D3959-3 DUCT, VERTICAL TUNNEL, AFT CENTER**

**NOTES:**

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: SEE -041
- 8) TOOLING: THERMOFORM PER MOLD DT9332-B PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.035" UNLESS OTHERWISE NOTED

PART NUMBER	DESCRIPTION
D3959-3KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3959-3KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	PH		
CHECKED	Q2	DRAWING NO.	REV. B
MFG. APPR.	WJ	D3959	SHEET 3 OF 3
APPROVED	WJ	TITLE	SCALE
DE APPR.	WJ	VERTICAL TUNNEL (206 L3/L4)	NTS
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**RELEASED**  
2010-01-06  
WJ



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 78160
<b>Description:</b>		<b>Part Number:</b> 03939-3R6Y
<b>Inspection Dwg:</b> B	<b>Rev:</b> C	<b>Page 1 of 1</b>

## FIRST ARTICLE INSPECTION CHECKLIST

### THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>1/8</u> "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

<b>Measured by:</b> <u>Wh</u>	<b>Date:</b> <u>12/01/23</u>
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### TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
12.3"	Ref	12.25"	✓		TAPE DL-01	
34.9"	Ref	34.8"	✓		TAPE DL-01	
7.5"	Ref	7.5"	✓		TAPE DL-01	
2.0"	Ref	2.0"	✓		TAPE DL-01	
1.0"	Ref	1.0"	✓		TAPE DL-01	
0.6"	Ref	0.62"	✓		TAPE DL-01	
1.6"	Ref	1.625"	✓		TAPE DL-01	
0.035"	M.V.	0.53"	✓		Can DL-02	

<b>Measured by:</b> <u>Wh</u>	<b>Date:</b> <u>12/01/23</u>
<b>Audited by:</b> <u>S</u>	<b>Date:</b> <u>2/6/23</u>
<b>Preliminary Approval:</b>	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14